

#### ED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Paton et al.

Title:

**OFFSET SPACER SMOS** 

PROCESS FOR FORMING N-

TYPE TRANSISTORS

Appl. No.:

10/619,877

Filing Date: 07/15/2003

Examiner:

Jeff B. Vockrodt

Art Unit:

7818

## CERTIFICATE OF EXPRESS MAILING hereby certify that this correspondence is being deposited with the United States Postal Service's "Express Mail Post Office To Addressee" service under 37 C.F.R. § 1.10 on the date indicated below and is addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. EV 431583642 US 06/24/04 (Express Mail Label Number) (Date of Deposit) Roberta A. Cooper (Printed Name)

# INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §1.56

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Submitted herewith on Form PTO/SB/08 is a listing of documents known to Applicants in order to comply with Applicants' duty of disclosure pursuant to 37 CFR §1.56. A copy of each listed document, except as noted below, is being submitted to comply with the provisions of 37 CFR §1.97 and §1.98.

The USPTO has waived the requirement under 37 CFR 1.98(a)(2)(i) to submit copies of U.S. patents and U.S. patent application publications when citing and submitting an Information Disclosure Statements in a patent application filed after June 30, 2003 and in an international application that has entered the national stage under 37 USC §371 after June 30, 2003. Accordingly, copies of these types of documents are not being supplied in connection with this application. Reference is being made to Pre-OG Notice from Office of Patent Legal Administration dated July 25, 2003, Information Disclosure Statements May Be Filed Without Copies of U.S. Patents and Published Applications in Patent Applications filed after June 30, 2003.

06/29/2004 LWONDIM1 00000094 10619877

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

## **TIMING OF THE DISCLOSURE**

The listed documents are being submitted in compliance with 37 CFR §1.97(c), before the mailing date of either a final action under 37 CFR §1.113, a notice of allowance under 37 CFR §1.311, or an action that otherwise closes prosecution in the application.

### RELEVANCE OF EACH DOCUMENT

The relevance of the foreign-language documents are described in English-language abstracts for Japanese Patent Nos. JP5160396, JP4123439 and JP3248433 provided herewith. An English translation of these three Japanese documents are not readily available. However, the absence of such translation does not relieve the PTO from its duty to consider the submitted foreign language documents (37 CFR §1.98 and MPEP §609). An English translation for Japanese Patent No. JP410270685 is enclosed.

Applicants respectfully request that any listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.

#### **FEE**

A fee in connection with submission of an information disclosure statement under 37 CFR §1.97(c) in the amount of \$180.00 in accordance with 37 CFR §1.17(p) is attached.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 CFR §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 06-1447. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 06-1447.

Respectfully submitted,

Date

FOLEY & LARDNER LLP

Customer Number: 26371

Telephone:

(414) 297-5564

Facsimile:

(414) 297-4900

Marcus W. Sprow

Attorney for Applicant

Registration No. 48,580

MODIFIED PTO/SB/08 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE rsons are required to respond to a collection of information unless it contains a valid OMB control Act of 1995, no

Under the Paperwork Redu

Sheet

Substitute for Istriction Complete if Known 10/619877 INFORMATION DISCLOSURE **Application Number** STATEMENT BY APPLICANT Filing Date 07/15/2003 **First Named Inventor** Eric N. Paton Date Submitted: June 24, 2004 **Group Art Unit** 2822 Jeff B. Vockrodt (use as many sheets as necessary) Examiner Name Attorney Docket Number 039153-0642 (H0970) of 2 1

U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	U.S. Patent Do	Kind	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant	
muais		Number	Code <sup>2</sup> (if known)			Figures Appear	
		6,559,015	B1	Yu	05-06-2003		
		6,506,654	B1	Wei et al.	01-14-2003		
		6,444,532	B2	Hasegawa	09-03-2002	·- <u>-</u>	
		6,356,476	B1	Kang	03-12-2002		
		6,184,097	B1	Yu	02-06-2001		
		6,153,484		Donaton et al.	11-28-2000		
		6,030,863		Chang et al.	02-29-2000		
		5,915,196		Mineji	06-22-1999		
		5,858,843		Doyle et al.	01-12-1999		
		5,856,225		Lee et al.	01-05-1999		
		5,716,861	<u> </u>	Moslehi	02-10-1998		
		5,675,159		Oku et al.	10-07-1997		
		5,595,919		Pan	01-21-1997		
		5,491,099		Hsu	02-13-1996		
		5,429,956		Shell et al.	07-04-1995		
		5,391,510		Hsu et al.	02-21-1995		
		5,374,575		Kim et al.	12-20-1994		
		5,264,382		Watanabe	11-23-1993		
		4,727,038		Watabe	02-23-1988		
		4,784,718		Mitani et al.	11-15-1988		
		4,745,082		Kwok	05-17-1988		
		2003/0153161	A1	Chu et al.	08-14-2003		
		2003/0068883	A1	Ajmera et al.	04-10-2003		
		2001/0003364	A1	Sugawara et al.	06-14-2001		

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No.1	Offic	Foreign Patent D ce <sup>3</sup> Number <sup>4</sup>	Ocument Kind Code <sup>5</sup> (if known)	Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Т <sup>6</sup>
		JP	410270685		Sony Corp.	10-09-1998		
		JP	5160396	•	Sharp Corp.	06-25-1993		
		JP	4123439		Toshiba Corp.	04-23-1992		
ļ , .		JP	3248433		NEC Corp.	11-06-1991		

NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	Т6			

001.1655154.1	
Examiner	Date
Signature	Considered

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant,

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

MODIFIED PTO/SB/08 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control

	Substitute fo	r form 1449B	/PTO	Complete if Known		
	INFORMATION	ON DISCLO	SURE	Application Number	10/619877	
	STATEMEN	BY APPL	CANT	Filing Date	07/15/2003	
	D-4- 0		2004	First Named Inventor	Eric N. Paton	
	Date Submitt	ea: June 24	, 2004	Group Art Unit	2822	
	(use as many s	heets as ne	cessary)	Examiner Name	Jeff B. Vockrodt	
Sheet	2	of	2	Attorney Docket Number	039153-0642 (H0970)	

NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>			
		BIN YU, et al., 70nm MOSFET with Ultra-Shallow, Abrupt, and Super-Doped S/D Extension Implemented by Laser Thermal Process (LTP), 1999 International Electron Devices Meeting; Technical Digest, Washington, DC; December 5-8, 1999 (6 pgs.)				
		A. CHATTERJEE, et al., Sub-100nm Gate Length Metal Gate NMOS Transistors Fabricated by a Replacement Gate Process, 1997 International Electron Devices Meeting, Technical Digest, Washington, DC; December 7-10, 1997 (5 pgs.)				
		·				
		·				
			•			
		· ·				

001.1655154.1						
Examiner Signature	Date Considered					

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.